

REMARKS

Claims 1-26 were examined on their merits while claims 27 and 28 have been added to the application. Therefore, claims 1-28 are presently pending in this application.

Formal Matters

1. The drawings stand objected to under 37 C.F.R. § 1.84. Applicant submits herewith a Request for Approval of Proposed Drawing Corrections. The proposed drawing corrections incorporate the Examiner's suggested changes. More specifically, Figures 1a-1d have been labeled as prior art while corrections have been made to the descriptions of items 14 and 16. The Examiner is therefore respectfully requested to withdraw the objection from the drawings.

2. New independent claims 27 and 28 have been added to the application to more broadly claim the present invention. Applicant submits that new claims 27 and 28 are in condition for allowance.

Art Rejections

1. Claims 1, 3-4, 7-8, 10-11, 13-14, 16-17, 20-22, 24 and 26 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Wagman et al. U.S. Patent No. 5,517,591 ("Wagman"). Claims 1 and 14 are independent claims. Applicant respectfully traverses this rejection for at least the reasons stated below.

In order to anticipate, each and every recitation of the claimed subject matter must be disclosed in the cited reference. Applicant respectfully submits that Wagman fails to disclose at least the following recitations of independent claims 1 and 14:

Claim 1

a plurality of flexible partitions, wherein each flexible partition extends from said core element to said interior surface of said jacket *at an angle that is skewed relative to a surface of said core element*, and

immediately adjacent flexible partitions enclose a volume thereby forming a buffer cell, *said volume of said buffer cell being immediately adjacent to said core element and configured to rotate in a predetermined direction when a radial crushing force is applied to the exterior jacket surface.*

Claim 14

a plurality of flexible partitions, wherein each flexible partition extends from said core element to said interior surface of said jacket *at an angle with respect to a radial line extending from said core element*, and

wherein immediately adjacent flexible partitions enclose a volume thereby forming a buffer cell, *said buffer cell volume being immediately adjacent to said core element and configured to rotate in a predetermined direction when a radial crushing force is applied to the exterior jacket surface. (italics added for emphasis)*

Wagman is directed to a compact slotted core ribbon cable. More specifically, Wagman discloses a cylindrical rod having a plurality of helical slots in its exterior surface for holding a stack of ribbon fibers. The pitch of the helical slot is selected to limit the compression experienced by the middle fibers during normal operating conditions.

The Examiner asserts that the helical slots 27, shown in Wagman's Figure 1, are equivalent to the claimed buffer cells created by a plurality of partitions wherein each partition extends from said core element to said interior surface of said jacket at an angle that is skewed relative to a surface of said core element. Applicant submits that the helical slots 27 are completely different from the claimed buffer cells.

The cable structure disclosed in Wagman cannot and does not offer the same protection against stresses as the claimed subject matter. Specifically, because the helical slots 27 are not angled in a skewed direction relative to the surface of the central strength member 11, the Wagman cable lacks the ability to rotate and move the fibers in a predetermined direction under crushing forces. More importantly, unlike the claimed subject matter, the rod portions 12 of Wagman are not flexible. In fact, if a force is applied to the Wagman cable, the rod portion 12 and helical slots 27 remain fixed, thus the fiber ribbons 13 would be crushed against the cylindrical rod. This is the exact problem that the claimed subject matter addresses and improves upon.

Because Wagman fails to disclose each recitation of independent claims 1 and 14, Wagman cannot possibly anticipate the claimed subject matter. Therefore, the Examiner is respectfully requested to withdraw the § 102(b) rejection from independent claims 1 and 14 and from the claims that depend therefrom.

2. Claims 2 and 15 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Wagman in view of Rutterman et al. U.S. Patent No. 6,449,412 ("Rutterman").

Claims 2 and 15 respectfully depend from independent claims 1 and 14. Wagman is deficient with respect to claims 1 and 14 for at least the reasons stated above. Therefore, the Examiner must rely on Rutterman to compensate for the foregoing deficiencies.

Rutterman is directed to a fiber optic ribbon interconnect cable. Specifically, Rutterman discloses a fiber optic cable having buffer material for defining a stress-cushioning zone between the ribbon and jacket so as to decouple the ribbon from the jacket when stresses are applied. Rutterman, however, also fails to disclose the above-identified recitations with respect to independent claims 1 and 14. Therefore, Applicant submits that claims 2 and 15 are patentable at least by virtue of their dependency. The Examiner is therefore respectfully requested to withdraw the § 103(a) rejection.

2. Claims 5, 6, 9, 18-19 and 23 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Wagman in view of Coleman U.S. Patent No. 6,052,502 ("Coleman").

Claims 5, 6 and 9 ultimately depend from independent claim 1, while claims 18, 19 and 23 depend from independent claim 14. Wagman is deficient with respect to claims 1 and 14 for at least the reasons stated above. Therefore, the Examiner must rely on Coleman to compensate for the foregoing deficiencies.

Coleman is similar to Wagman in that it also discloses a fiber optic cable having a slotted rod. Buffer tubes, that include ribbon stacks supported in a tensile window position, are placed within the grooves of the slotted rod. Coleman, however, fails to disclose the above identified recitations with respect to independent claims 1 and 14. Therefore, Applicant submits that

claims 5, 6, 9, 18, 19 and 23 are patentable at least by virtue of their dependency. The Examiner is therefore respectfully requested to withdraw the § 103(a) rejection.

3. Claims 12 and 25 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Wagman in view of Patel U.S. Patent No. 5,166,998 ("Patel").

Claim 2 depends from independent claim 1 while claim 25 depends from independent claim 14. Wagman is deficient with respect to claims 1 and 14 for at least the reasons stated above. Therefore, the Examiner must rely on Patel to compensate for the foregoing deficiencies.

Patel is directed to an optical fiber ribbon component. The optical fiber ribbon component is composed of a flexible web having a first and second group of plastic coated optical fibers. The first and second groups of fibers are removably affixed to the surfaces of the substrate. Patel, however, fails to disclose the above identified recitations with respect to independent claims 1 and 14. Therefore, Applicant submits that claims 5, 6, 9, 18, 19 and 23 are patentable at least by virtue of their dependency. The Examiner is therefore respectfully requested to withdraw the § 103(a) rejection.

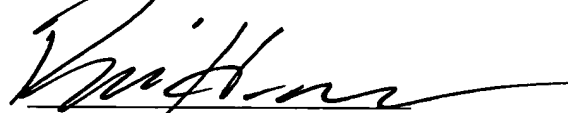
In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880.

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Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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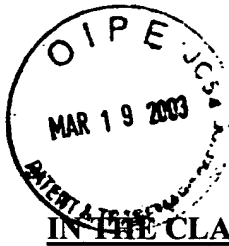
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Date: March 19, 2003



APPENDIX

VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS:

1. (Amended) A fiber optic cable comprising:

a jacket having an interior jacket surface and an exterior jacket surface;

a core element centrally disposed within the jacket; and

a plurality of flexible partitions, wherein each flexible partition extends from [extending from] said core element to said interior surface of said jacket at an angle that is skewed relative to a surface of said core element, and

immediately adjacent flexible partitions enclose a volume thereby forming a buffer cell, said volume of said buffer cell being immediately adjacent to said core element and configured to rotate in a predetermined direction when a radial crushing force is applied to the exterior jacket surface [in a skewed direction, wherein said partitions form a plurality of buffer cells].

14. (Amended) A fiber optic cable comprising:

a jacket having an interior jacket surface and an exterior jacket surface;

a core element centrally disposed within the jacket; and

a plurality of flexible partitions, wherein each flexible partition extends from [extending from] said core element to said interior surface of said jacket [wherein said partitions are located] at an angle with respect to a radial line extending from said core element, and

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wherein immediately adjacent flexible partitions enclose a volume thereby forming a buffer cell, said buffer cell volume being immediately adjacent to said core element and configured to rotate in a predetermined direction when a radial crushing force is applied to the exterior jacket surface. [thereby forming at least one buffer cell]